U.S. Fish & Wildlife Service

Bull Trout Draft Recovery Plan and proposed Critical Habitat

Puget Sound Recovery Unit

What areas are included in the Puget Sound Management Unit?

The Puget Sound Unit is located in northwestern Washington, east of the Olympic Peninsula and west of the Cascade Mountains. The Puget Sound unit is bordered by the Cascade crest to the east, Puget Sound to the west, portions ofthe Lower Columbia River and Olympic Peninsula Recovery Units to the south and the United States-Canada border to the north. It extends across Whatcom, Skagit, Snohomish, King, Pierce, Thurston and Island counties. The major river basins initiate from the Cascade mountain range and flow west, discharging into Puget Sound, with the exception of the Chilliwack River system, which flows northwest into British Columbia and discharged into the Fraser River system.

The Puget Sound Management Unit is one of two units within the Coastal-Puget Sound Distinct Population Segment (DPS) of bull trout. The Coastal-Puget Sound DPS is significant to the species as a whole because it contains the only anadromous forms of bull trout in the coterminous United States, thus, occurring in a unique ecological setting. Also unique to this population segment is the overlap in distribution with Dolly Varden, another native char species extremely similar in appearance to bull trout, but distinct genetically.

How much of the area is proposed as critical habitat?

This unit includes proposed critical habitat areas totaling 1,523 miles of streams, 44,214 acres of lake habitat in five lakes,and near-shore habitat along566 miles of marine shoreline. The stream mileage represents approximately 13 percent of the total stream distance in the recovery unit found on 1:100,000 scale map coverage.

Who developed the draft Bull Trout Recovery Plan and critical habitat proposal?

The draft critical habitat proposal was developed by local, State and Federal agencies, Tribal governments and private individuals and organizations since the species was listed in 1999. We relied heavily on information developed by the bull trout recovery team for the Puget Sound Management Unit, which was composed of Federal, State, Tribal, County and City biologists.

The critical habitat proposal was based in large part on information on the current distribution and habitat requirements of the species.

What is the relationship between the draft Bull Trout Recovery Plan and the critical habitat proposal?

The draft recovery and critical habitat proposal are closely linked. The information developed by the recovery unit teams, and the science underlying that information, are the basis for the critical habitat proposals. However, critical habitat is designed to provide for the conservation of the species by identifying those areas essential for conservation and requiring special management, whereas a recovery plan is a much larger blueprint providing guidance for the eventual recovery and de-listing of a species.

Who would be affected by recovery efforts and a critical habitat designation?

A recovery plan is advisory only and carries no regulatory authority. It is the Fish and Wildlife Service's estimation of the actions necessary for the recovery of the species. Agencies, communities or individuals are encouraged to take voluntary actions described in the recovery plan to benefit bull trout.

Federal agencies are required to consult with the Fish and Wildlife Service on actions they carry out, fund, or authorize that might affect critical habitat. It is important to note that in most cases, this is already occurring under the section 7 interagency consultation requirements of the Endangered Species Act. Non-Federal entities, including private landowners, that may also be affected could include, for example, those seeking a U.S. Army Corps of Engineers 404 permit under the Clean Water Act to build an in-water structure, those seeking Federal approval to discharge effluent into the aquatic environment, or those seeking Federal funding to implement private property improvements, where such actions affect the aquatic environment that has been designated as critical habitat. But again, in most cases where this link between activities on private lands and Federal funding, permitting, or authorization exists, consultation under section 7 of the Endangered Species Act is already occurring.

What is the status of bull trout in the Puget Sound Management Unit?

Puget Sound bull trout were listed as threatened in 1999. Bull trout in this management unit are dispersed throughout both fresh and marine waters. Within the Puget Sound Management Unit there are eight core areas with a total of 57 local populations identified.

Bull trout are found in the Chilliwack, Nooksack, lower and upper Skagit, Snohomish-Skykomish, Stillaguamish, upper Cedar (Chester Morse Lake system), and Puyallup River basins. With the exception of the Chilliwack and upper Cedar River systems, these basins all support anadromous bull trout that use Puget Sound marine waters for foraging and migration. Bull trout from these river basins have also been documented using other river systems (Samish, Green, Nisqually) and Lake Washington for feeding, over-wintering, and migration. The Chilliwack River system may also support anadromous bull trout, but these fish would enter marine waters by way of the Frazer River in British Columbia, Canada. Populations in the Nooksack, Stillaguamish, and Puyallup systems are believed to be at low abundance based on available information. Few spawning sites have been located in the Chilliwack, Nooksack, Stillaguamish, and Puyallup River systems, all having low numbers of redds. There is no long-term monitoring in these areas. Monitoring in the Skagit River, Snohomish-Skykomish River, and Chester Morse Lake systems indicate bull trout abundance in these particular watersheds has been stable or increasing in recent years.

Historically, bull trout were more abundant within the Green and Nisqually Rivers, but are rarely observed in these systems today. Currently, these areas are not believed to support spawning populations but provide important foraging, migration, and over-wintering habitat for recovery.

What are the threats to bull trout in the Puget Sound Management Unit?

Historic uses, especially water diversions, hydropower development, forestry, agriculture, fisheries management and residential

and urban development within the core areas, may have significantly reduced populations of bull trout. Lasting effects from some, but not all, of these early land and water developments still act to limit bull trout production in core areas. Threats from current activities include aspects of operation and maintenance of dams and other diversion structures, forest management practices, agriculture practices, road construction and maintenance, and residential development and urbanization. The presence of non-native species such as brook trout continue to pose a threat through competition, hybridization, and potential predation in some core areas.

What are the recovery goals and objectives?

The goal of the bull trout recovery plan is to ensure the long-term persistence of self-sustaining, complex, interacting groups of bull trout distributed throughout the species' native range so that the species can be de-listed.

What are the criteria for measuring recovery?

Recovery will be measured according to four criteria: distribution, abundance, population trends and connectivity in the watershed. The recovery plan includes specific, quantifiable standards for each of the following criteria:

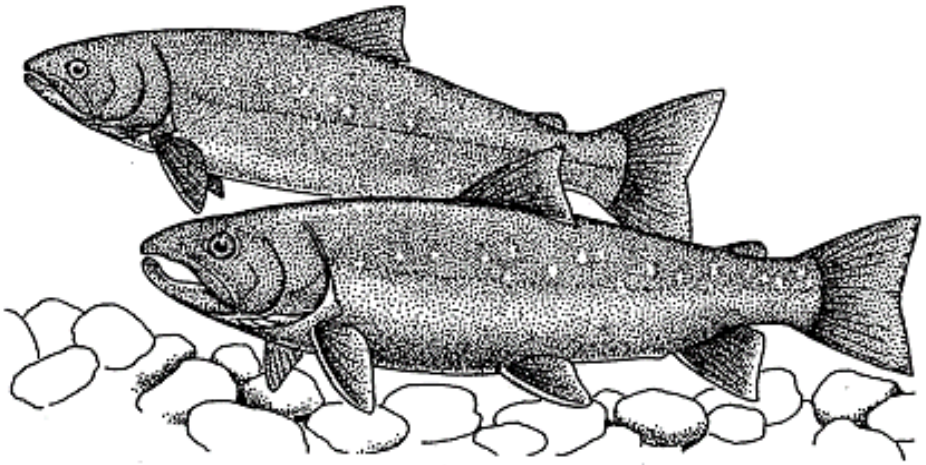
1. Distribution: Maintain or expand the current distribution of bull trout in the 57 identified local populations distributed within the Chilliwack (3 populations), Nooksack (10), Lower Skagit (19), Upper Skagit (8), Stillaguamish (4), Snohomish-Skykomish (4), Chester Morse (4), and Puyallup (5) areas; and confirm or attempt to restore spawning distribution in five additional identified potential local populations.

2. Abundance: Achieve minimum estimated abundance of at least 10,800 adult spawners among all core areas in the Puget Sound Management Unit.In each of the core areas, the total adult bull trout abundance, distributed among local populations, typically must exceed 1,000 fish. Recovered abundance targets are: Chilliwack (600), Nooksack (2,000), Lower Skagit (3,800), Upper Skagit (1,400), Stillaguamish (1,000), Snohomish-Skykomish (500), Chester Morse Lake (500) and Puyallup (1,000).

3. Trend: Restore adult bull trout to exhibit stable or increasing trends in abundance at or above the recovered abundance level within core areas in the Puget Sound Management Unit based on 10 to 15 years (representing two generations) of monitoring data.

4. Connectivity: Restore connectivity by identifying and addressing specific existing and potential barriers to bull trout movement in the Puget Sound Management Unit.These criteria will be met when intact migratory corridors connect all local populations within each core area to provide the opportunity for genetic exchange and maintaining life history diversity.

What actions will be necessary to recover bull trout in the Puget Sound Management Unit?



Actions required for bull trout recovery are protecting, restoring and maintaining suitable habitat conditions and water quality. This can be achieved by identifying diversions or dams (such as the Bellingham Diversion, Buckley Diversion, andGorge Dam) that impede fish passage and by providing fish passage where feasible; eliminating culvert barriers; and preventing development of new barriers to fish passage. Improving habitat conditions in and along mainstem rivers is critical to preserving the anadromous life history form. These river corridors provide important foraging and over-wintering habitat for bull trout, and the vital link between their freshwater spawning habitats and their marine foraging habitats. Maintaining or improving water quality in bull trout core areas or core habitat is also of prime importance. An example of this is improving routine road maintenance practices to reduce sediment in nearby streams or restoring and protecting riparian areas along waterways for their water-cooling effect. For more details, please see the Bull Trout draft Recovery Plan for the Coastal Puget Sound Distinct Population Segment, Puget Sound Management Unit, Volume I.

There are a number of research needs that have been identified for this Management Unit. A high priority goal for the Puget Sound Management Unit is to acquire more complete information on the current distribution and abundance of bull trout within each core area. Additional information is needed on bull trout use of and distribution in estuarine and marine waters of Puget Sound.

How long will recovery take?
A recovery plan is advisory only and carries no regulatory authority; therefore it is difficult to determine how long it will take to recover bull trout. In the Clark Fork Recovery Unit the current status of bull trout is better than in many other portions of the range, but a tremendous amount of work remains to be done to reconnect and restore impaired habitat and to cope with threats from nonnative species. It may be 3 to 5 bull trout generations (15 to 25 years), or possibly longer, before significant reductions can be made in the identified threats to the species and bull trout can be considered eligible for de-listing.

How much will recovery cost?
The total cost for bull trout recovery in the Puget Sound Recovery Unit is estimated at $68.1 million spread over a 25-year period, or an average of $2.8 million per year. If the time frame for recovery can be reduced, lower estimated costs would occur.

These costs are attributed to bull trout conservation. However, many costs are shared with salmon recovery efforts, and other aquatic species will also benefit.

How can I obtain copies of the documents?
The documents, along with maps, fact sheets, photographs and other materials may be found on the Pacific Region's website at .

How can I comment?
The Service will be accepting comments until October 28, 2004, on its bull trout draft recovery plan in the Puget Sound and Olympic Peninsula region in Washington. Comments on the draft recovery plan may be mailed to the U.S. Fish and Wildlife Service, Western Washington Fish and Wildlife Office, 510 Desmond Drive SE, Lacey WA 98503.

The Service also is accepting public comments on the agency's proposal to designate critical habitat for the Coastal Puget Sound distinct population segments of bull trout. Comments will be accepted until August 25, 2004, and may be submitted to the U.S. Fish and Wildlife Service, Regional Office, attn: John Young, Bull Trout Coordinator, 911 N.E. 11th Avenue, Portland OR 97232; faxed to 503-231-6243.
In addition, a series of public meetings and public hearings will be held in July and August. Times and locations will be posted on our Bull Trout website at http://species.fws.gov/bulltrout and publicized in local newspapers.